

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-40 (canceled)

41. (New) A monolithically integrated device having at least a first mode of light and second mode of light propagating therein, comprising:

a first waveguide; and

a second waveguide coupled to said first waveguide, said second waveguide having a taper formed therein for guiding light between said first waveguide and said second waveguide;

wherein the first mode of light and the second mode of light are divided unequally between said first waveguide and said second waveguide.

42. (New) The device according to claim 41, wherein said taper is a linear taper.

43. (New) The device according to claim 41, wherein said taper is a multi-section taper.

44. (New) The device according to claim 41, wherein said taper comprises a squared end, said squared end having a width less than 1 μm .

45. (New) The device according to claim 41, wherein said taper performs adiabatic coupling of light between said first waveguide and said second waveguide.

46. (New) The device according to claim 41, wherein said taper reduces coupling loss of light between said first waveguide and said second waveguide.

47. (New) A photonic device comprising:

at least a first waveguide and a second waveguide, wherein one of said first waveguide and said second waveguide comprise a taper for guiding light between said first waveguide and said second waveguide, and wherein said first waveguide and said second waveguide have different effective indices of refraction resulting in a first mode of light and a second mode of light being divided unequally between said first waveguide and said second waveguide.

48. (New) The device according to claim 47, wherein said taper is a linear taper.

49. (New) The device according to claim 47, wherein said taper is a multi-section taper.

50. (New) The device according to claim 47, wherein said taper comprises a squared end, said squared end having a width less than 1 μm .

51. (New) The device according to claim 47, wherein said taper performs adiabatic coupling of light between said first waveguide and said second waveguide.

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52. (New) The device according to claim 47, wherein said taper reduces coupling loss of light between said first waveguide and said second waveguide.